

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A high-pressure discharge lamp,  
comprising: lamp comprising:  
a burner including a burner wall and a discharge chamber enclosed by said burner wall, wherein a region with a lowest temperature and a region with a highest temperature establish themselves at the contour of the burner wall during operation of the lamp and in dependence on the mounting position of the lamp, and

a multilayer interference filter which is provided on a portion of an outer contour a coldest part of the burner wall, which wherein interference filter reflects towards the discharge chamber mainly light in a wavelength range of infrared light, and wherein the material of the burner wall has its maximum emissive

~~power and the material of the burner wall is not transparent to the infrared light one layer of the multilayer interference filter includes at least one of niobium oxide, hafnium oxide, silicon nitride.~~

2. (Currently Amended) The high-pressure discharge lamp as claimed in claim 1, wherein ~~a the one layer with has~~ a higher refractive index ~~and a than a further layer with of the multilayer interference filter with having a lower refractive index occur,~~ and wherein a plurality of the one layer and the further layer occurs in alternation in the layer structure of the multilayer interference filter.

3. (Currently Amended) The high-pressure discharge lamp as claimed in claim 2, wherein the further layer of the interference filter having the lower refractive index preferably comprises predominantly  $\text{SiO}_2$ , and the ~~second one~~ layer of the interference filter is made of a material ~~further includes zirconium oxide having a higher refractive index than  $\text{SiO}_2$ , preferably predominantly zirconium oxide ( $\text{ZrO}_2$ )~~.

## Claims 4-6 (Canceled)

7. (Previously Presented) The high-pressure discharge lamp as claimed in claim 1, wherein the high-pressure gas discharge lamp is a UHP lamp.

8. (Currently Amended) The high-pressure discharge lamp as claimed in claim 1, wherein ~~the material of~~ the burner wall ~~is made~~ in particular of comprises quartz, and accordingly the interference filter is capable of reflecting mainly infrared light in ~~the~~ a wavelength range from 2  $\mu\text{m}$  to 5  $\mu\text{m}$ .

9. (Previously Presented) A lighting unit comprising at least a lamp as claimed in claim 1.

10. (Previously Presented) A projection system comprising at least a lamp as claimed in claim 1.

11. (New) The high-pressure discharge lamp of claim 1, wherein

the portion of the coldest part provided with the multilayer interference filter has a higher temperature than a previous coldest spot prior to application of the multilayer interference filter on the portion.

12. (New) The high-pressure discharge lamp of claim 1, wherein the multilayer interference filter shifts a location of the coldest part.

13. (New) The high-pressure discharge lamp of claim 1, wherein the multilayer interference filter is configured to lower an operating temperature of the high-pressure discharge lamp by approximately 40°K.